

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE



Re the application of: Fowlkes, D.M. et al.

Serial No.: 09/258,600

Filed: February 26, 1999

For: *YEAST CELLS ENGINEERED TO PRODUCE
PHEROMONE SYSTEM PROTEIN SURROGATES,
AND USES THEREFOR*

Attorney Docket No.: CPI-012CP4DV

Group Art Unit:

Examiner:

Assistant Commissioner for Patents
Washington, D.C. 20231

Certificate of First Class Mailing (37 CFR 1.8(a))

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Assistant Commissioner for Patents, Washington, D.C. 20231 on the date set forth below.

May 18, 1999
Date of Signature and of Mail Deposit

By:

Peter C. Lauro
Registration No. 32,360
Attorney for Applicants

INFORMATION DISCLOSURE STATEMENT

Dear Sir:

Applicants and their attorney are aware of the following publications and information, listed on the attached PTO Form 1449, and in accordance with 37 CFR §1.97 hereby submit these publications for the Examiner's consideration.

References AA-AD and BC-BK were made of record in U.S. Patent No. 5,879,591 (Serial No. 08/461,598) (Atty. Docket No. CPI-012CP4C), of which this application is a Divisional Application and to which this application claims priority. Therefore, in accordance with 37 C.F.R. §1.98(d), references AA-AD and BC-BK are not enclosed herewith, but will be provided upon request.

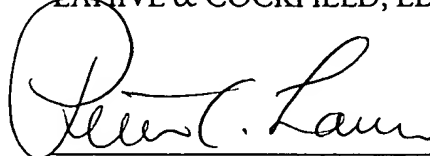
This Information Disclosure Statement also presents publications cited in an International Search issued on February 18, 1999 during the prosecution of PCT/US98/21168 and a second European Search Report mailed on March 29, 1999 during the prosecution of European Divisional Application No.: 98202997.7 which are related to the

above-referenced application. These publications are cited on the enclosed PTO Form 1449, and copies of the European and International Search Reports references AE, AF, AH-AK and AQ-AS are also enclosed. Reference AG was made of record in the parent application and, therefore, in accordance with 37 C.F.R. §1.98(d), reference AG is not enclosed herewith, but will be provided upon request.

This statement is not to be interpreted as a representation that the cited publications are material, that an exhaustive search has been conducted, or that no other relevant information exists. Nor shall the citation of any publication herein be construed *per se* as a representation that such publication is prior art. Moreover, Applicants understand that the Examiner will make an independent evaluation of the cited publications.

The undersigned hereby certifies references AE-AK and AQ-AS were cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this statement. Accordingly, no additional costs are believed to be due in connection the reporting of these references. In addition, pursuant to 37 C.F.R. § 1.97(b)(3), no additional costs are believed to be due in connection with the filing of this Information Disclosure Statement. If, however, a first Office Action on the merits issues in this application bearing a mailing date prior to the date of this Information Disclosure Statement, please charge the appropriate fee as required under 37 C.F.R. § 1.17(p) to our Deposit Order Account No. 12-0080.

Respectfully submitted,
LAHIVE & COCKFIELD, LLP

A handwritten signature in cursive script, appearing to read "Peter C. Lauro", is written over a horizontal line.

Peter C. Lauro
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28 State Street
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Date: May 18, 1999

Enclosures

APPLICANT FACSIMILE OF FORM PTO-1449
REV 7-80U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICE

ATTY DOCKET NO

SERIAL NO.

CPI-012CP4DV

09/258,600

LIST OF PUBLICATIONS CITED BY APPLICANT

(Use several sheets if necessary)

APPLICANT

Fowlkes, D.M. et al.

FILING DATE

February 26, 1999

GROUP

U.S. PATENT DOCUMENTS

	EXAMINER TRADEMARK OFFICE	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	AA	5,096,815	03/92	Ladner et al	435	69.1	
	AB	5,283,173	2/94	Fields et al.	435	6	
	AC	5,468,614	11/95	Fields et al.	435	6	
	AD	5,580,736	12/96	Brent et al.	435	6	

FOREIGN PATENT DOCUMENTS

	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES NO
	AE	WO 88/10308	12/88	PCT		
	AF	WO 91/12273	8/91	PCT		
	AG	WO 94/23025	10/94	PCT		
	AH	WO 95/30012	11/95	PCT		
	AI	WO 97/11159	3/97	PCT		
	AJ	WO 92/05244	4/92	PCT		
	AK	WO 98/13513	4/98	PCT		

OTHERS (including Author, Title, Date, Pertinent Pages, Etc.)

	AL	Chien, C.T. et al., "The two-hybrid system: A method to identify and clone genes for proteins that interact with a protein of interest," <i>PNAS</i> , 88:9578-9582 (1991);
	AM	Cwirla, S., et al., "Peptides on Phage: A Vast Library of Peptides for Identifying Ligands," <i>PNAS</i> , 87:6378-6382 (1990);
	AN	Devlin, J., et al., "Random Peptide Libraries: A Source of Specific Protein Binding Molecules," <i>Science</i> , 249:404-406 (1990);
	AO	Fields, S. et al., "A novel genetic system to detect protein-protein interactions," <i>Nature</i> , 340:245-246 (1989);
	AP	Gyuris, J. et al., "Cdi1, a human G1 and S phase protein phosphatase that associates with Cdk2," <i>Cell</i> , 75:791-803 (1993);
	AQ	Manfredi, J. et al., "Autocrine stimulation of yeast through human G-coupled receptors," <i>J. Cell. Biochem.</i> , 18B:224 (1994);
	AR	Kang, Y.S. et al., "Effects of expression of mammalian Galpha and hybrid mammalian-yeast Galpha proteins on the yeast pheromone response signal transduction pathway," <i>Molecular and Cellular Biology</i> , 10:2582-2590 (1990);
	AS	King, K. et al., "Control of yeast mating signal transduction by a mammalian beta2-adrenergic receptor and Gs alpha subunit," <i>Science</i> , 250:121-123 (1990).
Date Considered		
Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.		

APPLICANT FACSIMILE OF FORM PTO-1449 REV 7-80	U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	ATTY DOCKET NO. SERIAL NO. 09/258,600
LIST OF PUBLICATIONS CITED BY APPLICANT (Use several sheets if necessary)		APPLICANT Fowlkes, D.M. et al.
		FILING DATE GROUP

U.S. PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
BA						

FOREIGN PATENT DOCUMENTS

DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES NO
BB					

OTHERS (including Author, Title, Date, Pertinent Pages, Etc.)

BC	Koff, A. et al., "Human cyclin E, a new cyclin that interacts with two members of the CDC2 gene family," <i>Cell</i> , 66:1217-1228 (1991);
BD	Lew, D., et al., "Isolation of Three Novel Human Cyclins by Rescue of G1 Cyclin (Cln) Function in Yeast," <i>Cell</i> , 66:1197-1206 (1991);
BE	Hughes, D. et al., "Complementation of byr1 in fission yeast by mammalian MAP kinase kinase requires coexpression of Raf kinase," <i>Nature</i> , 364:349-352 (1993);
BF	Murphy, A.J.M, et al., "Autocrine Stimulation of Yeast Through Human G-Coupled Receptors," <i>J. of Cell Biochem.</i> , 18B:224 (1994);
BG	Raymond, M., et al., "Functional Complementation of Yeast ste6 by a Mammalian Multidrug Resistance mdr Gene," <i>Science</i> , 256:232-234 (1992);
BH	Scott, J. and Smith, G., "Searching for Peptide Ligands with an Epitope Library," <i>Science</i> , 249:386-390 (1990);
BI	Whiteway, M., et al., "Dominant Negative Selection of Heterologous Genes: Isolation of Candida Albicans Genes that Interfere with Saccharomyces Cerevisiae Mating Factor-induced Cell Cycle Arrest," <i>PNAS</i> , 89:9410-9414 (1992);
BJ	Xiong, Y., et al., "Human D-Type Cyclin," <i>Cell</i> , 65:691-699 (1991);
BK	Zervos, A. et al., "Mxi1, a protein that specifically interacts with max to bind Myc-Max recognition sites," <i>Cell</i> , 72:223-232 (1993).
BL	
BM	
BN	
BO	
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Office No. CPI-012CP4DV

THE "RECEIVED" STAMP OF THE PATENT AND TRADEMARK OFFICE
IMPRINTED HEREON ACKNOWLEDGES THE FILING OF:

Description of Paper*: Transmittal Letter (in duplicate), Information Disclosure Statement, PTO Form 1449, European and International Search Reports (2), and full copies of references (9) are enclosed along with this postcard.

Title: *Yeast Cells Engineered to Produce Pheromone System Protein Surrogates, and Uses Therefor*

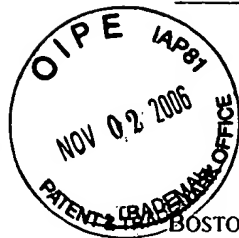
Name of Applicant(s): Fowlkes, D.M. et al.

Serial No.: 09/258,600

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Date: May 18, 1999

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May 18, 1999

COPY

Assistant Commissioner for Patents
Washington, D.C. 20231

Re: U.S. Patent Application No.: 09/258,600, Filed February 26, 1999
*Yeast Cells Engineered to Produce Pheromone System Protein Surrogates, and
Uses Therefor*
Inventor: Fowlkes, D.M. et al.
Our Ref. No.: CPI-012CP4DV

Dear Sir:

I enclose herewith for filing in the above-identified application the following:

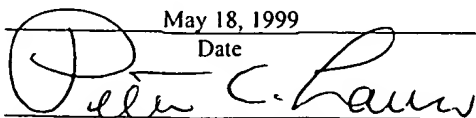
1. Information Disclosure Statement;
2. PTO Form 1449 (2 sheets);
3. Full copies of references (9);
4. A copy of the European and International Search Reports; and
5. Return receipt postcard.

No additional costs are believed to be due in connection with the filing of this Information Disclosure Statement. However, please charge any necessary fees in connection with the enclosed statement to our Deposit Order Account No. 12-0080. For this purpose, a duplicate of this sheet is attached.

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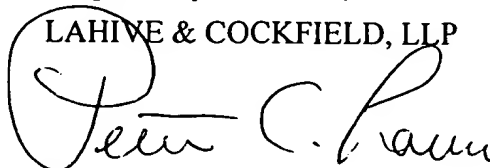
Date



Peter C. Lauro, Reg. No. 32,360

Respectfully submitted,

LAHIVE & COCKFIELD, LLP



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